

iLink LCD  
by  
Nel-Tech Labs, Inc.

Installation & User Manual

Includes special section for iLink LCD LR (Local Record Option)



## **Index:**

Introduction .....	3
iLink Layout Summary.....	4 - 5
LCD Layout Summary .....	6 - 8
Web Browser .....	9
Installation .....	10 - 12
Connectivity Test/Volume Adjustments.....	13
Troubleshooting .....	14
Warranty & FCC .....	15

## **Introduction:**

The iLink LCD is an Internet downloadable messaging system utilizing state-of-the-art MPEG compression to achieve truly stunning near-CD quality audio storage and playback. All unit management and audio downloads are accomplished by your dealer using a special controller software suite. When an update is needed your dealer connects to the iLink via your high-speed Internet connection and digitally transfers the MP3 audio files and configuration settings you need. Changes can be initiated on demand, scheduled from minutes to weeks, or the iLink can be instructed to connect automatically and load new audio. With the Local Record option users can record up to 16 message slots, set interval time and select internal or external background music sources all from LCD interface.

## **Unpacking and Inspection:**

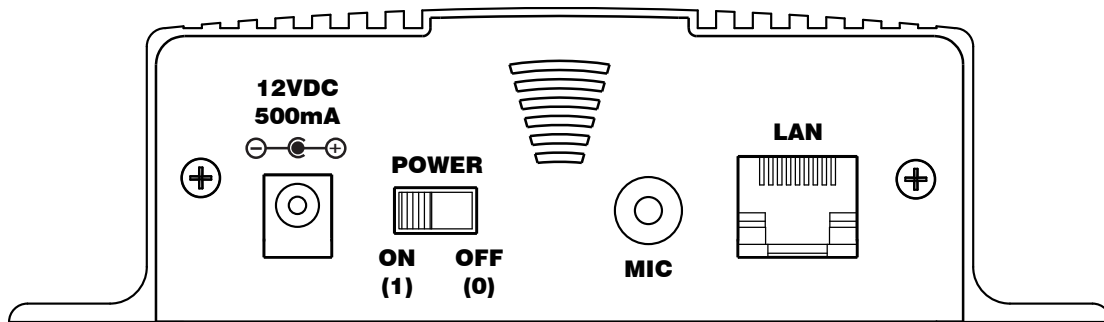
Before you begin installation, unpack and verify you have all the correct parts.

- (1) iLink LCD
- (1) 12VDC @ 500mA power supply
- (1) Ethernet cable
- (1) RCA to RCA cable
- (1) RCA to 3.5mm adapter
- (2) Wall mount screws
- (1) Instruction manual
- (1) Microphone (Local Record Option Only)

If you are missing any of these parts STOP and call your dealer.

## iLink Layout Summary:

### Front of Unit



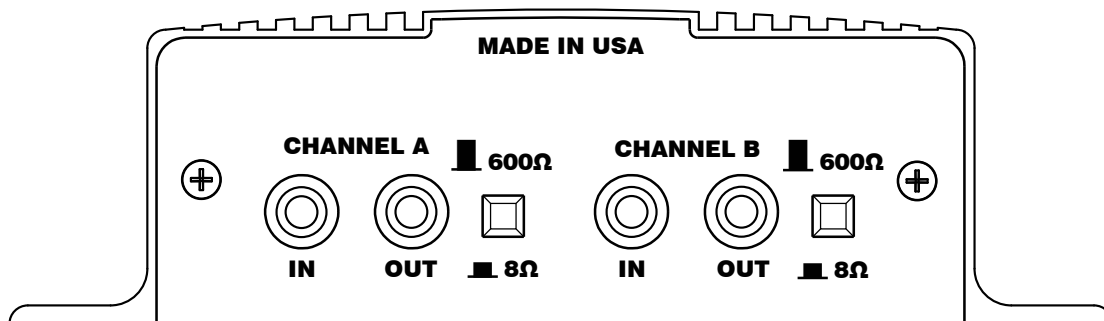
**12VDC** - This is where the supplied 12VDC @ 500mA power pack is connected.

**POWER** - Use this switch to turn the unit ON and OFF.

**MIC** - Microphone input for Local Recording (Optional). Uses a standard 1/8" type computer microphone.

**LAN** - This jack connects to the local Ethernet that allows the iLink connectivity to the Internet. The jack also has two built in LEDs that report back network activity and speed status.

### Rear of Unit

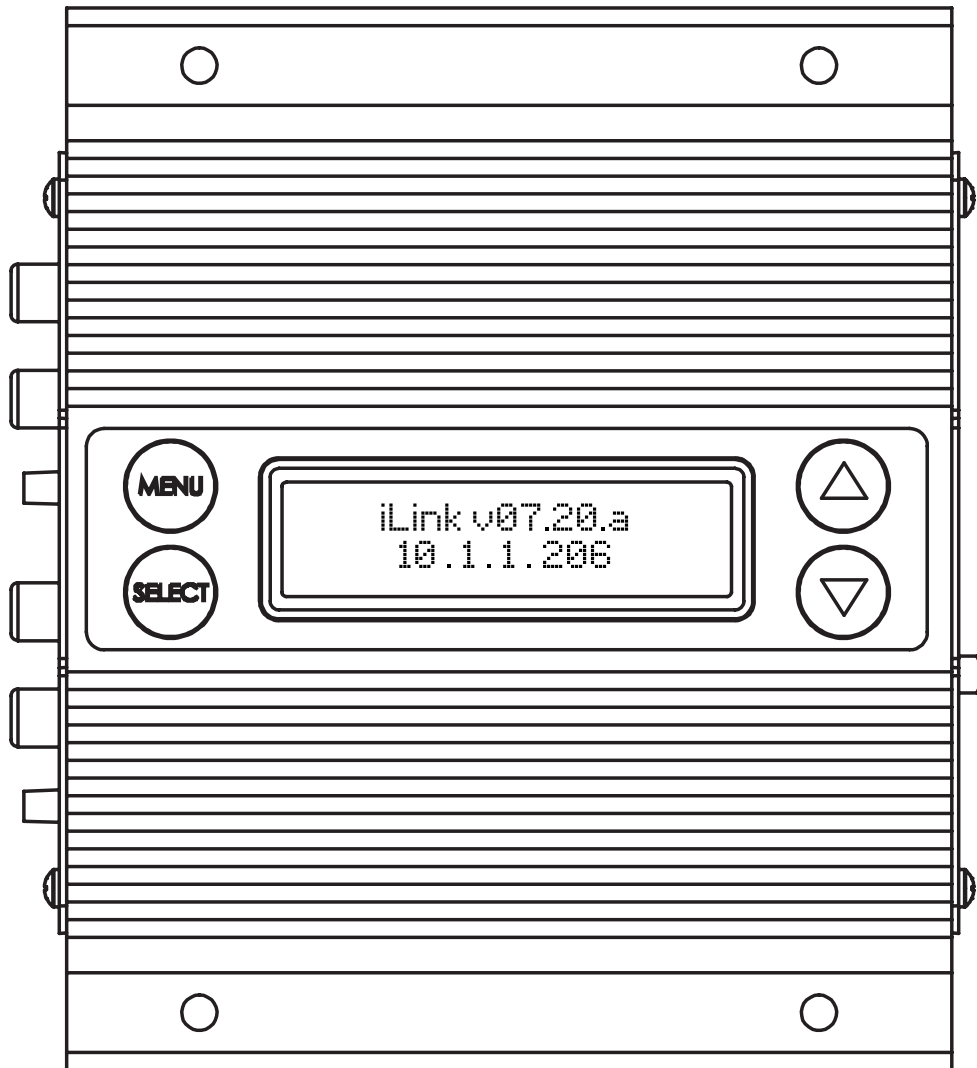


**CHANNEL A or B (IN)** - This signal level jack allows an external BGM (Background Music) source to be fed through the iLink unit.

**CHANNEL A or B (OUT)** - This jack connects to a phone systems MOH input or a PA amplifier.

**8Ω or 600Ω** - This switch changes the output impedance of the CHANNEL A or B (OUT) jack.

## Top of Unit



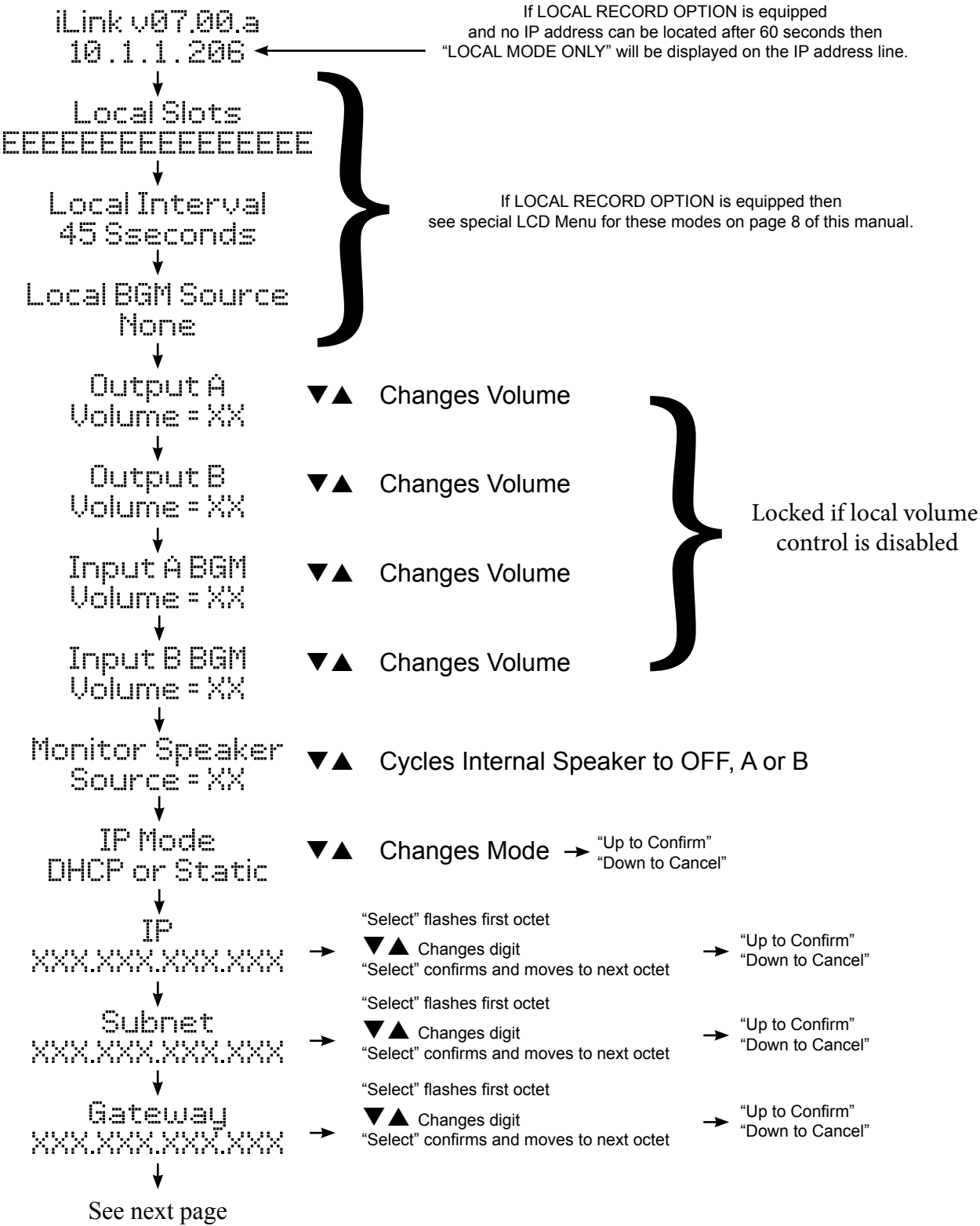
MENU BUTTON - Keypad button used to cycle through menu items.

SELECT BUTTON - Keypad button used to select menu item to be changed.

UP and DOWN BUTTONS - Keypad buttons used to make changes to selected items.

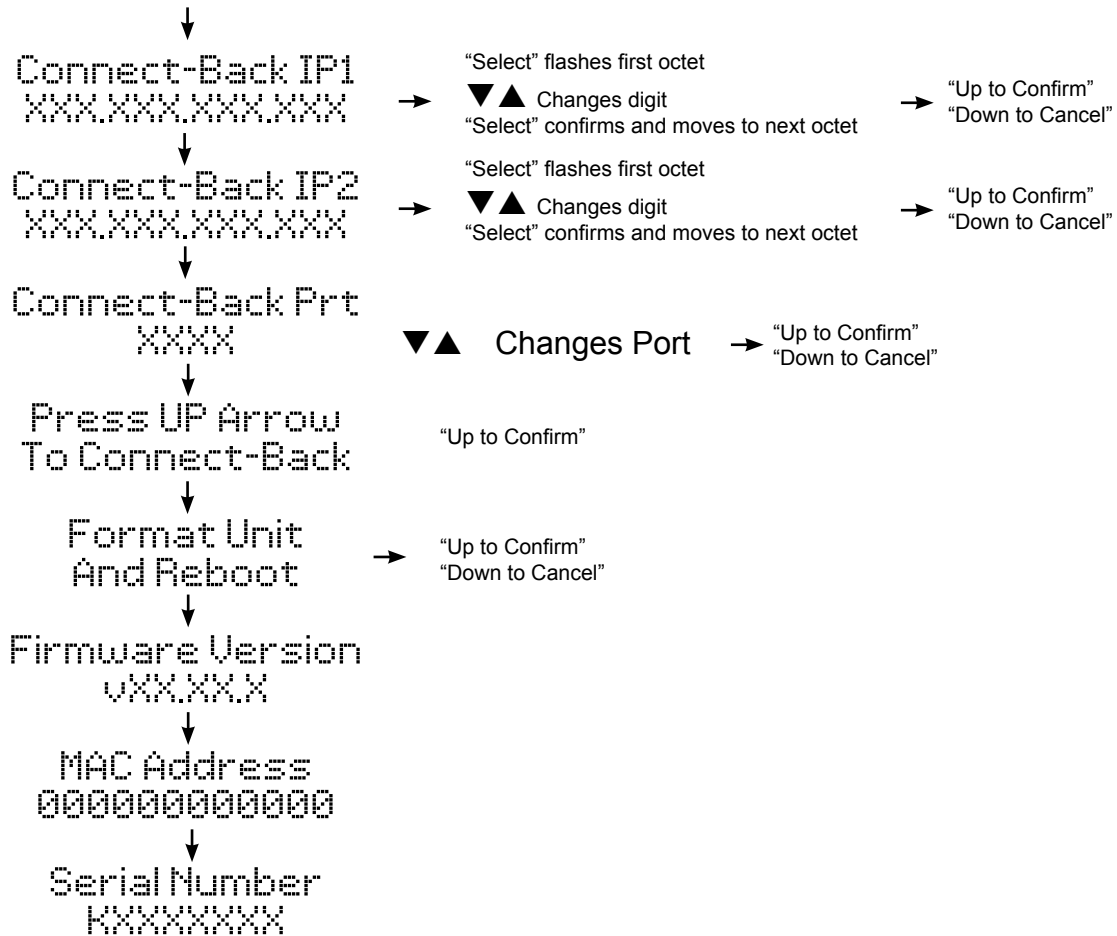
2 x 16 LCD - White lettering on blue backlighting LCD used to display unit information.

LCD Menu



## LCD Menu (Continued)

Continued from previous page



Pressing MENU advances through menu selections.  
Pressing SELECT chooses menu option to be changed.

Note:

Changes to IP Settings only available in STATIC MODE

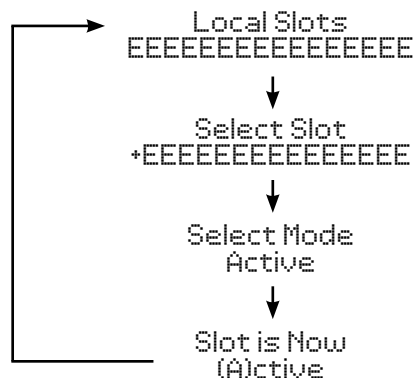
If MAIN MENU item is idle for more than 90 seconds the LCD reverts back to MAIN SCREEN

If SUB MENU is idle for more than 90 seconds the LCD reverts back to MAIN SCREEN and CANCELS any current changes.

## LOCAL RECORD OPTION - LCD Menu (Feature on Channel A Only)

Before recording make sure microphone is plugged into unit.

Example:



### Local Record

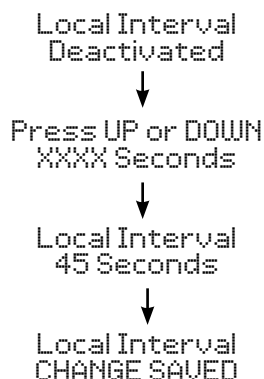
1. Press MENU until the LOCAL SLOTS screen is on the LCD.
2. Press SELECT
3. On the SELECT SLOT menu the selected slot will have a "+". Press the ▼▲ arrows until the slot that is to be changed has a "+".
4. Press SELECT
5. ON the SELECT MODE menu press the ▼▲ arrows to choose the record, play, activate, deactivate or delete function to be used in that slot.
6. Press SELECT and the following action on that slot will occur.
  - a. RECORD → → RECORDING <- SELECT to Stop  
↓  
Saving Audio  
Please Wait  
Slot XX is Playing  
Slot is Now (A)ctive
  - b. PLAY →
  - c. ACTIVATE →
  - d. DEACTIVATE → Slot is Now (D)eactivated
  - e. DELETE → Slot is Now (E)mpty

#### Recording Tips:

Recording should be performed about 6 to 8 inches from the microphone.  
Maximum time of 45 seconds per slot is available for recording.  
After RECORD function - slot will be placed in DEACTIVATED Mode.

---

### Interval

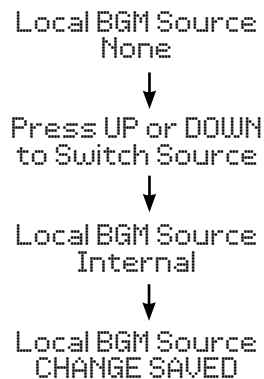


1. Press MENU until the LOCAL INTERVAL is on the LCD.
2. Press SELECT.
3. Press the ▼▲ arrows to select interval time from 1 to 3600 seconds. Hold ▼▲ arrows to increment or decrement interval time faster.
4. Press SELECT to accept change.

Default Setting: DEACTIVATED

---

### Background Music Source (BGM)



1. Press MENU until the LOCAL BGM SOURCE is on the LCD.
2. Press SELECT.
3. Press the ▼▲ arrows to select INTERNAL, EXTERNAL or NONE.
4. Press SELECT to accept change.

NOTE: If setting BGM source to INTERNAL then the NTL Studio control software must be used to select the BGM playback content.

Default Setting : BGM EXTERNAL



## Web Browser (Feature on firmware version 07.09.x or higher)

The iLink LCD has a built-in password protected web browser that will display the units serial number, firmware version and MAC address. This browser will also allow the units communication mode, connect-back address and port to be changed.

### ***iLink LCD Configuration Manager***

**Serial Number :**

K1132664

**Firmware Version :**


07.09.X

**MAC Address :**

00:60:35:11:5a:b8

**Status :**

LOGIN OK



**Unit Information**

**Current Settings**

-->

**New Settings**

**Mode :**

DHCP

**IP Address:**

10.1.1.216

**Subnet Mask :**

255.255.255.128

**Default Gateway :**

10.1.1.129

**Connect-Back IP #1 :**

10.1.1.171

**Connect-Back Port #1 :**

80

**Connect-Back IP #2 :**

0.0.0.0

**Connect-Back Port #2 :**

80

Submit

**Press "Submit" to make changes to the unit.**

**Leave "New Settings" blank if there is no change.**

When changing **Mode** either DHCP or STATIC must be typed in the "New Settings" column. When changing to STATIC mode the IP, Subnet and Gateway must all be entered or the settings will not take when submitted. The **Status** will indicate if the settings have been updated to the unit.

## Installation :

**Step 1:** Wall or shelf mount the unit. Rubber feet and screws are supplied in the accessory kit.

**Step 2:** Verify the power switch on the right side of the unit is set to OFF. Attach the included power pack to a wall or power strip receptacle, then attach the other end to the jack on the right side of the unit labeled 12VDC.

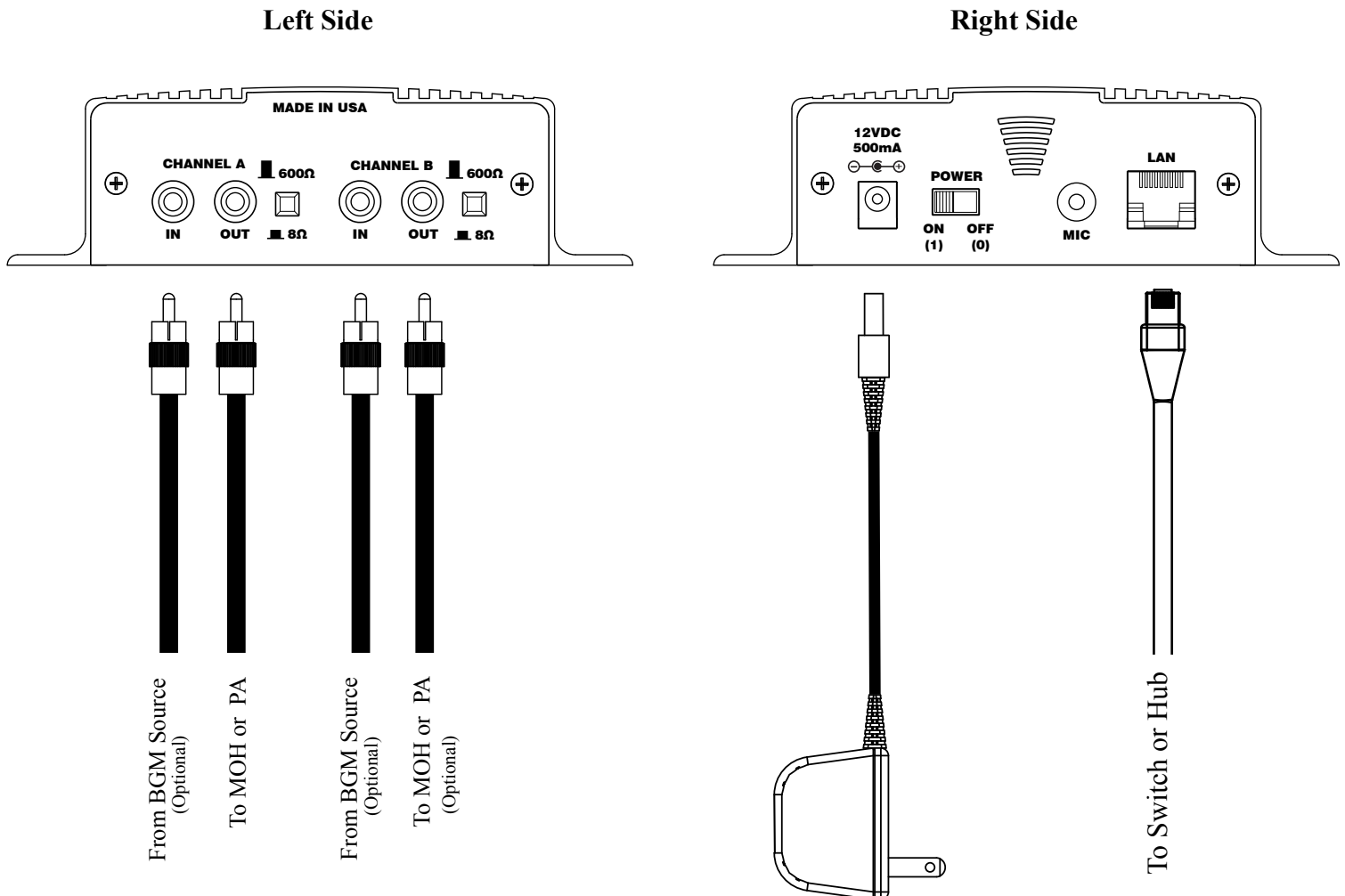
**Step 3:** Make sure any amplifiers (if using any) are turned OFF prior to any connections.

**Step 4:** Connect a RCA cable (supplied in the accessory kit) to the CHANNEL A (OUT) jack on the left side of the unit. Connect the other end of the RCA cable to a phones MOH port, PA amplifier or speaker. For dual output applications follow the same procedure for the CHANNEL B (OUT).

**Step 5:** (Optional) For messaging only applications the existing BGM (Background Music) can be fed through the iLink. Connect the audio source to the CHANNEL A or B (IN) jack(s) on the left side of the unit. This jack must only be fed signal level audio - ANY AMPLIFIED AUDIO WILL DAMAGE THE UNIT.

**Step 6:** Connect an Ethernet cable (supplied in the accessory kit) to the LAN jack on the right side of the unit. Connect the other end to a 10/100 speed switch or hub.

### Wiring Diagram



## Connectivity Test:

**Step 1:** Verify the power switch on the right side of the unit is set to ON.

**Step 2:** On the LCD menu verify unit has a valid IP, subnet, gateway, connect-back & port.

Example:

```
IP
010.001.001.206

Subnet
255.255.255.128

Gateway
010.001.001.120

Connect-Back IP1
10.1.1.171

Connect-Back Prt
3020
```

**Step 3:** On the LCD menu go to the “PRESS UP ARROW TO CONNECT-BACK” and press the UP ARROW.

Example:

```
Press UP Arrow
To Connect-Back
```

**Step 4:** The LCD will display the “FORCING CONNECT PLEASE WAIT”

Example:

```
Forcing Connect
Please Wait
```

**Step 5:** If there is a Connect-Back record waiting for the unit then the LCD will display “ACTIVE CONNECT XXX.XXX.XXX.XXX”.

Example:

```
Active Connect
10.1.1.171
```

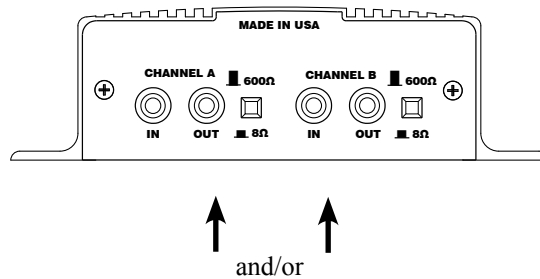
If there is no record waiting then it will display “CONNECT TO XXX.XXX.XXX.XXX” for one second on the LCD to confirm a successful connectivity.

Example:

```
Connect To
10.1.1.171
```

## Channel A & B Output Level Adjustments:

**Step 1:** Verify CHANNEL A or B (OUT) is connected to either a phone's MOH port, PA amplifier or speaker.

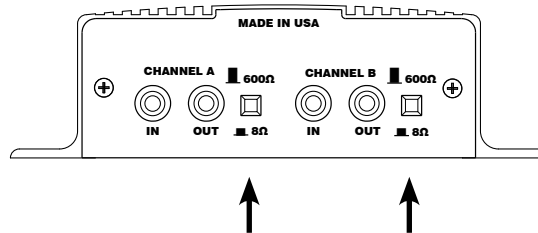


**Step 2:** Verify the unit is playing audio by listening to the internal monitor speaker.

Monitor Speaker  
Source = XX

▼▲ Cycles Internal Speaker to OFF, A or B

**Step 3:** Depending upon the device the 8Ω/600Ω switch may need to be pushed to better match the impedance of the device the iLink is driving.



**Step 4:** Adjustment of the stored audio output level can be done through the LCD and Menu. Depending upon the application either call into the phone system and be placed on hold OR listen to the PA systems speakers to fine tune volume.

Output A  
Volume = XX

Output B  
Volume = XX

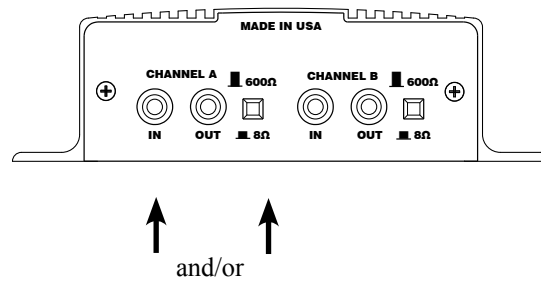
▼▲ Changes Volume

If you see a “LOCKED VOLUME SETTINGS” message then the dealer has locked this setting.

**Step 5:** All volume adjustments are applied live so changes are saved to the unit instantly.

## Channel A & B Input: BGM Feedthrough Level Adjustments (Optional):

**Step 1:** Plug feed from an unamplified external background music source to the CHANNEL A or B (IN)



**Step 2:** Verify the unit is playing audio by listening to the internal monitor speaker.

Monitor Speaker  
Source = XX

▼▲ Cycles Internal Speaker to OFF, A or B

**Step 3:** Adjustment of the background music feedthrough level can be done through the LCD and Menu. Depending upon the application either call into the phone system and be placed on hold OR listen to the PA systems speakers to fine tune volume.

Input A BGM  
Volume = XX

Input B BGM  
Volume = XX

▼▲ Changes Volume

If you see a “LOCKED VOLUME SETTINGS” message then the dealer has locked this setting.

**Step 4:** All volume adjustments are applied live so changes are saved to the unit instantly.

## Other LCD Status Messages:

Unit is booting:

Booting..  
Please Wait..

Unit is initializing:

System Is  
Initializing..

Unit is getting ip address:

System Is  
Seeking IP..

Dealer is connected to unit:

Direct Connect  
Is Active

Unit is connected to dealer:

Active Callback  
xxx.xxx.xxx.xxx

Format in progress :

Factory Reset  
In Process

Unit is formatting:

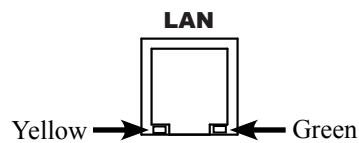
System Is  
Formatting

Local Record Mode Only:

iLink v07.00.a  
Local Mode Only

---

## LAN LED Indicators



Action	LED
10MB	OFF
Not Used	FLASHING
100MB	SOLID

Action	LED
No Activity	OFF
Activity	FLASHING
Link	SOLID

# Limited Warranty

**TERMS:** Nel-Tech Labs warrants to the original purchaser (“Buyer”) that the Product sold is free from defects in material and workmanship at the time of purchase. The warranty period begins at the time of Product’s original purchase by the first end-user. The warranty applies for five (5) year from the original date of purchase, or as long as the product is owned by the original purchaser, whichever comes first. Included in the warranty are parts and labor. Buyer must provide written notice to Nel-Tech Labs of any defective part or conditions within the warranty period. If the defect is not the result of improper use, service, maintenance or installation, and if the equipment has not been otherwise damaged or modified after shipment, Nel-Tech Labs or its authorized representative shall either replace or repair the defective Product at Nel-Tech Labs’s option. No credit shall be allowed for work performed by Buyer or unauthorized parties. Out-of-warranty repairs are invoiced at the current Nel-Tech Labs hourly rate plus the cost of parts, shipping and handling. In the event that the product serial number is missing or has been tampered with in any way, the foregoing warranty is void and without effect and Nel-Tech Labs shall have no liability whatsoever on account of defects to such product.

**LIMITATIONS:** Except as stated above, there are no warranties, express or implied, that extend beyond the specifications for the product. Nel-Tech Labs expressly disclaims any warranty, express or implied, that equipment sold hereunder is of merchantable quality or that it can be used, or is fit for any particular purpose. Buyer purchases and accepts equipment solely on the basis of the warranty here in above expressed. Under no circumstances shall Nel-Tech Labs be liable by virtue of this warranty or otherwise for any special indirect, secondary or consequential damages to any person or property arising out of the use or inability to use the product.

**REPAIRING OR REPLACING PRODUCT:** Buyer may obtain the repair or replacement of any eligible part or equipment covered under this warranty through a Nel-Tech Labs dealer only. Buyer is responsible for all shipping and handling charges in connection with the performance of this warranty. Products returned to Nel-Tech Labs must be securely packaged to prevent damage in transit, freight prepaid, and insured for replacement value. A return authorization number assigned by Nel-Tech Labs must be clearly marked on the outside of the shipping container. Proof of purchase must accompany shipment. Items delivered to Nel-Tech Labs without a return authorization clearly marked on the outside of the shipping container, and/or without proof of purchase is refused.

**CONTACT:** Please contact Nel-Tech Labs at the address and phone number below to receive a return authorization number and to arrange for the repair or replacement of a flawed part covered by this warranty. Please indicate the Product’s serial number in all correspondence or a RMA authorization number in the absence of a serial number. Nel-Tech Labs, 4 Ash Street Extension, Derry, NH 03038, Phone: 1.603.425.1096.

**COPYRIGHT NOTICE:** Unauthorized or unlicensed use of copyrighted audio content is illegal and Nel-Tech Labs, Inc. takes no responsibility for such action by the user of this equipment.

**FCC Part 15 :** This equipment has been tested and found to comply within the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of the equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct interference at his own expense. In order to maintain compliance with FCC regulations shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio & television reception.

Changes or modifications not expressly approved by Nel-Tech Labs could void the users’ authority to operate the equipment.

**IC ES 003 :** This Class A digital apparatus complies with Canadian ICES-003 C et appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

**CE CONFORMITY :** The Nel-Tech Labs iLink conforms with the following standards, in accordance with the EU Safety, EMC Emissions, & EMC Immunities : EN 60950-1:2001, EN 55022:1998 for Class A, EN 55024:1998 + A1:2001 + A2:2003, EN 61000-4-2:1995 + A1:1998, EN 61000-4-3:1995, EN 61000-4-4:1995, EN 61000-4-5:1995, EN 61000-4-6:1996, EN 61000-5-11:1994.





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ilink\_lcd\_manual  
Rev. E - 08/12

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